

**Application to USEPA Region IV
for CCR Permit Program Approval
in Accordance with
Section ### of Subtitle ### of the
Water Infrastructure Improvements for the Nation Act**

Georgia Department of Natural Resources
Environmental Protection Division
Date

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I. Introduction: Background and Scope

Background

Early efforts to effectively manage solid waste in Georgia include the enactment of the Georgia Solid Waste Management Act of 1972. Responsibilities for implementing the solid waste requirements under this law were assigned to the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources (DNR). The 1972 Act was replaced in 1990 by the Georgia Comprehensive Solid Waste Management Act (“Act”, attached), Title 12, Chapter 8, Article 2 of the Official Code of Georgia Annotated. In 1993, Georgia applied for a state Solid Waste Permit Program to implement Subtitle D of the Resource Conservation and Recovery Act and 40 CFR Part 258 Criteria for Municipal Solid Waste Landfills (MSWLs). This application was approved, and Georgia has been regulating MSWLs with delegated authority from USEPA for the past 24 years.

Under the provisions of the 1990 Act, and prior to the Environmental Protection Agency (EPA)’s Final Rule: Disposal of Coal Combustion Residuals from Electric Utilities, (“Federal Rule”) Georgia regulated a small subset of facilities that disposed of Coal Combustion Residuals (CCR). The state has done so by regulating disposal of CCR at Electric Utilities (“EUs”) where CCR is placed in landfills. EPD took the position that CCR was an ‘industrial waste,’ at a “private industrial solid waste disposal facility” (“PISWDF”),” under the 1990 Act, and as such, required a Solid Waste Handling Permit. PISWDFs are those facilities “that are operated exclusively by and for a private solid waste generator for the purpose of accepting solid waste generated exclusively by said private solid waste generator.” During the time when federal regulations for disposal of this waste stream were not in place, the state moved toward applying most of the design and operational standards of MSWLs to PISWDFs receiving CCR. For example, the five operating CCR landfills at EUs have permits that require liners and leachate collection systems and groundwater monitoring requirements. Additionally, EPD’s Water Branch permitted surface impoundments at EUs where CCR deposits collected under the National Pollutant Discharge Elimination System program with coordination from the Solid Waste Program.

In 2015, the Federal Rule was published. EPD reviewed the Federal Rule and concluded that the best practice would be to adopt the Federal Rule by reference, with the exception of those portions that were not as strict as Georgia’s intended policy. Additionally, Georgia EPD expanded the requirements of the Federal Rule to include those units not regulated by the Federal Rule, but that accepted CCR. Such units, included, but were not limited to, MSWLs that accept CCR and inactive CCR surface impoundments. These revisions to State rules were adopted by the Georgia Board of Natural Resources on October 26, 2016 and became effective November 22, 2016 (2016 CCR Rule Revisions). It is worth noting that Georgia’s 2016 CCR Rule Revisions were effective prior to EPA’s response to the partial vacatur and in response to the vacatur, EPD will clarify certain parts of the 2016 CCR Rule Revisions.

Scope

Georgia’s 2016 CCR Rule Revisions addressed two areas: 1) expanding EPD’s regulatory authority over those PISWDF operations at EUs that generate CCR by incorporating the Federal Rule by reference for CCR generated by EUs and 2) expanding EPD’s regulatory authority for disposal of CCR at MSWL:

- 1) The 2016 CCR Rule Revisions incorporate the Federal Rule by reference almost in its entirety. 391-3-4-.10 was set aside to specifically incorporate the Federal Rule as a “stand alone”

permitting program for CCR disposal generated by EUs. EPD broadened 391-3-4-.10 to include disposal at units that are not covered by the Federal Rule, including:

- a. Inactive NPDES surface impoundments (or, those surface impoundments that had been regulated using the NPDES permits – see above)
- b. Inactive CCR landfills
- c. Dewatered Surface Impoundments

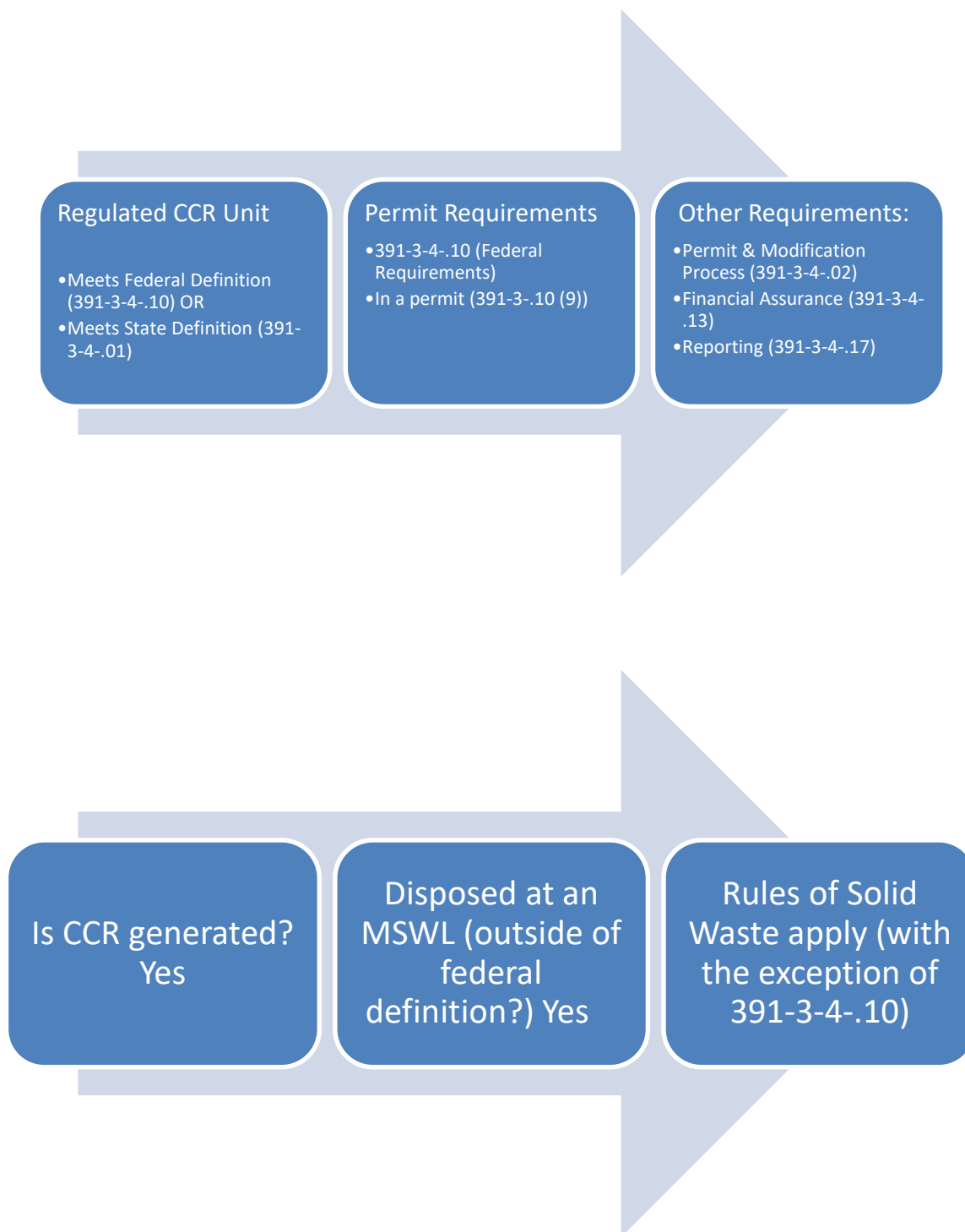
EPD also did not exclude “inactive” EU facilities based on operation and/or closure time.¹

- 2) The 2016 CCR Rules created new requirements under *existing* solid waste permitting requirements for those MSWL that have accepted or will accept CCR waste, including groundwater monitoring requirements and public notice requirements.

For the purpose of this document, EPD will focus on the CCR requirements that were incorporated and expanded under 391-3-4-.10. Again, it is important to note that this is a stand-alone section that built on the requirements for a PISWDF that requires very little integration with the existing solid waste permitting rules as 40 CFR 257.60 through 257.107, effective on October 19, 2015 were incorporated and adopted by reference.

Permitting Process: CCR generated by an EU (Federal Rule) vs. CCR disposal at a MSWL

¹ While EPA has recently vacated this provision from the CFR, thereby regulating impoundments, Georgia has been and will continue to regulate such impoundments. Therefore, the substantive difference between the provisions is minimal. However, Georgia will clarify such discrepancy in subsequent rule-making. Additionally, Georgia will also clarify certain discrepancies in definitions of facilities. While generally Georgia’s definitions are more expansive, in the instance that Georgia’s are more restrictive, such language will be clarified to meet the federal definition.



II. Georgia's CCR Permitting Program

Definitions

Most definitions pertinent to Georgia's CCR Permitting Program can be found in Rule 391-3-4-.10. This is where Georgia has incorporated the Federal Rule by reference, including the majority of its definitions. However, there are exceptions to this, listed below:

- 391-3-4-.01
 - Aquifer (EPD holds that the “quantities” in this definition controls given that it is stricter than the Federal Rule).
 - CCR Landfill, CCR Unit, and CCR Surface Impoundment- includes active or inactive, goes beyond Federal Rule to include previously permitted and/or unregulated units, such as:
 - Dewatered surface impoundment
 - NPDES-CCR surface impoundment
 - Qualified Groundwater Scientists- EPD includes professional geologists as qualified groundwater scientists. (Note: Approved plans will require that all reports come under the seal of a professional engineer.)
- 391-3-4-.10
 - Dewatered Surface Impoundment, NPDES- CCR Surface Impoundment, and Inactive CCR Landfill: these definitions bring in all CCR units of any type regardless of whether they accepted CCR prior to or after October 19, 2015.
 - Beneficial Reuse- EPD requires submittal of any project, no automatic approval based on tonnage.

Applicability

391-3-4-.10 incorporates the Federal Rule with the exceptions as noted above and creates a stand-alone permitting program for CCR Units. However, EPD does recognize that the exclusion of Commercial Industrial Landfills that receive CCR is in conflict with the Federal Rule, and will delete such exclusion. To the extent definitions are inconsistent due to the vacatur, EPD will clarify any inconsistencies to meet the revised August 5, 2016 rule. This would include exemption of commercial industrial landfills and any reference to 40 CFR 257, subpart D that have been removed. In addition to -.10, CCR units must also comply with general permitting requirements of a PISWDF found in 391-3-4-.02; Financial Assurance Requirements found in 391-3-4-.13 and reporting requirements found in 391-3-4-.17. Many sections of the CCR Rule specifically exclude CCR units from regulatory authority (example 391-3-4-.06(6)); however, where this needs additional clarification, EPD can provide this in a rulemaking.

Operating Criteria

As stated in 391-3-4-.10(5)(c), CCR units will be subject to an individual permit. While the language used states a “solid waste handling permit,” EPD has created its own subset of solid waste handling permits- CCR permit- that is based on federal requirements. EPD has provided a template of this permit as an attachment.

Variances

Georgia’s Rules for Solid Waste Management may not be any less stringent than Federal regulations. As such, it is worth noting that any the provisions for a variance in the 2016 CCR Rule Revisions must be read in the context of O.C.G.A. 50-13-9.1(h). O.C.G.A. 50-13-9.1(h)(1) states no variance or waiver shall be sought or authorized when any agency rule or regulation has been adopted or promulgated in order to implement or promote a federally delegated program. Furthermore, O.C.G.A. 50-13-9.1(h)(5) states that no variance or waiver shall be sought or authorized for any rules, regulations, standards, or procedures are adopted or promulgated by the Department of Natural Resources for the protection of the natural resources, environment, or vital areas of this state.

III. Jurisdiction and Responsibilities

The Official Code of Georgia Annotated (O.C.G.A.) Volume 10, Title 12, as amended through 2017, specifically O.C.G.A. 12-8-23.1, gives the Director of the Environmental Protection Division of the Department of Natural Resources the primary responsibility for implementation of the solid waste management program. The Director is also instructed to coordinate his activities with those of other state agencies and local political jurisdictions to achieve a unified and effective solid waste management program. Finally, under state law, it is the responsibility of the State Attorney General's office to represent all state agencies.

IV. Number of CCR Units

Approximately 40 disposal sites for CCR generated at Electric Utilities (~10 landfills and ~30 impoundments) will be subject to 40 CFR Part 257. Five CCR landfills are currently operating and must demonstrate compliance with 40 CFR Part 257 to be re-permitted; the remaining CCR landfills are in closure. All of the operating landfills are currently conducting disposal operations in cells with composite liners that meet the requirements of §257.70. Three of these operating facilities also have pre-existing portions where CCR was deposited in cells that do not meet the requirements. These unlined cells will be closed. There are approximately 30 CCR impoundments in the state; the final tally depends on whether some smaller impoundments will be treated independently or in combination for regulatory purposes. We are still in the process of determining how many impoundments will be subject to the requirements of part 257. Currently, the State is not reviewing any permits for new CCR units, and there are not any permitted sites in the construction (pre-disposal) stage.

V. Staff Resources for CCR Permit Program Implementation

Georgia's Solid Waste Management Program, part of EPD's Land Protection Branch, will be the lead program for permitting, compliance, and enforcement of CCR units. These functions will largely be carried out by staff from central location in Atlanta (Table #, below). Seven district offices throughout the state (see Tables # and #) and EPD's Emergency Response Team are available to quickly respond to reports of releases or complaints, but will not be involved in the routine regulation of CCR units.

Within the Solid Waste Management Program, the Solid Waste Permitting Unit is responsible for reviewing permit applications and issuing permits, reviewing plans and other demonstrations of compliance with 40 CFR 257, conducting construction inspections of cells and closure activities, and leading compliance inspections of CCR Units. The Environmental Monitoring Unit is responsible for determining site suitability, reviewing groundwater monitoring plans and reports, reviewing corrective action plans and reports, inspecting groundwater well construction, and assisting with compliance inspections. The Recovered Materials Unit will conduct beneficial use determinations for CCR. The Surface Mining and Tire Management Units do not have duties related to CCR.

Georgia regulates dam safety through O.C.G.A. 12-5-370, The Georgia Safe Dams Act of 1978, and through Rules for Dam Safety, Chapter 391-3-8. The Safe Dams Unit (Table #), within EPD's Watershed Protection Branch, will assist in regulating CCR impoundments. Specifically, the Safe Dams Unit will provide the technical assistance for reviews relevant to 40 CFR 257.73 and 257.74 (structural integrity criteria for impoundments) and 40 CFR 257.82 (impoundment capacity requirements). The

Safe Dams Unit will provide technical assistance for reviews relevant to 40 CFR 257.83 (inspection requirements for impoundments).

Additional staff resources are available through the Attorney General's Office for assistance on any enforcement actions such as consent or administrative orders or other legal matters such as permit appeals. Other specialized support, such as quantitative risk analysis or laboratory analyses of soil or water samples, is available within EPD.

Table #: Solid Waste Management Program

Program Manager

Operations Analyst

Solid Waste Permitting Unit

- Unit Manager
- 6 Engineers

Environmental Monitoring Unit

- Unit Manager
- 9 Geologists

Recovered Materials Unit

- Unit Manager
- Engineer
- 2 Environmental Specialists

- Comm. Outreach Specialist

Tire Management Unit

- Unit Manager
- 7 Environmental Specialists
- Data Processor
- Licensing Technician

Surface Mining Unit

- Unit Manager
- Engineer
- 2 Geologists

Table #: EPD Districts Offices

Coastal District (Brunswick)
East Central District (Augusta)
Mountain District (Atlanta)
Mountain District (Cartersville)
Northeast District (Athens)
Southwest District (Albany)
West Central District (Macon)

Table # Safe Dams Unit

Unit Manager
10 Staff

VI. Permitting Requirements

O.C.G.A. 12-8-24(a) of the Georgia Comprehensive Solid Waste Management Act and Chapter 391-3-4-.02 of the Rules for Solid Waste Management both require that no person shall engage in solid waste handling or construct or operate a solid waste handling facility without first obtaining a permit from the Director of the Georgia Environmental Protection Division (EPD) authorizing such activity. The solid waste handling permit includes both design and operating conditions.

O.C.G.A. 12-8-23(1)(b) gives to the Board of Natural Resources the authority to adopt rules and regulations prescribing the procedures to be followed in applying for solid waste handling permits and requiring the submission of pertinent information deemed relevant in connection with the issuance of such permits. Chapter 391-3-4-.02(6) requires that all applications for permits and major permit modifications shall be on forms prescribed by EPD and shall be accompanied by all pertinent information as EPD may require.

Permitting Procedures for New CCR Units

The permitting procedures as required by O.C.G.A. 12-8-20 and the Rules for Solid Waste Management, Chapter 391-3-4, for a CCR Unit are outlined in **Figure #**.

Figure #. Permitting Procedures for CCR Units

A Site Assessment Report addressing Rule 391-3-4-.10 (3) Location Restrictions must be prepared by a professional geologist or professional engineer registered in Georgia. The Site Assessment Report is submitted to the Division for review as part of the permit application.

When all the applicable material is prepared the “CCR Unit -Application For Solid Waste Handling Permit” can be submitted to the Division. The permit application is accompanied by a statement that the applicant either owns the property on which the CCR Unit is to be located or has the permission of the owner to use the property for a CCR Unit; written verification of compliance with local zoning or land use ordinances as required by O.C.G.A. 12-8-24 (g) and a site assessment report as described above.

Upon receipt of an application, EPD issues a public advisory which is matter of policy, not a regulatory requirement. The public advisory briefly describes the application that has been submitted. The public advisories are issued monthly and are issued to concerned parties that have requested to be on the public advisory list. After issuing the public advisory, EPD begins the review of the Site Assessment Report to demonstrate that it meets the criteria outlined in Rule 391-3-4-.10 (3)

EPD will review the application and supporting data, make a determination as to the suitability or unsuitability of the proposed site for a CCR Unit, and notify in writing the applicant and the host local government of its determination. If the proposed site is unsuitable, the Division will notify the applicant in writing and the process will end. If the proposed site is suitable the applicant will proceed with the design of the proposed CCR Unit in accordance with the criteria outlined in Rule 391-3-4-.10 as well as any Site Limitations given in the Site Suitability Notice. The Design and Operational Plan for the proposed CCR Unit, along with supporting data and design calculations, will be submitted to EPD for review.

The proposed CCR Unit design and operational plan and supporting documentation must be prepared by a professional engineer registered to practice in Georgia. The Solid Waste Permitting Unit reviews the design and operational plan to assure that it meets all the requirements of Rule 391-3-4-.10. When the design and operational plan and other portions of the permit application have been determined to meet

the standards of 391-3-4-.10, EPD typically notifies the applicant that the plans are approvable and to send a reminder of any other final tasks (such as providing financial assurance) that must be completed prior to permit issuance. The Program will draft site-specific permit conditions for the proposed CCR Unit.

Figure 2 from 1993 application is N/A (Facilities negotiation flow chart)

Once the solid waste handling permit is issued the Director notifies the legal organ and the chief elected official of the host local government in which the facility is to be located. For thirty days after issuance the permit may be appealed. If no appeal is received the permit becomes final. If an appeal is received within 30 days, no further construction or operations may take place under the permit and the permit enters into the appeals process as specified by the Georgia Administrative Procedures Act.

Procedures for Permit Modifications

Permit modifications are classified as either major or minor under the requirements set forth in Rule 391-3-4-.02(4). Major modifications are changes which substantially alter the design of the facility, management practices, the types of wastes being handled, or the methods of waste handling, and due to the nature of the changes, would likely have an impact on the ability of the facility to adequately protect human health and the environment. Minor modifications are changes that do not substantially alter the permit conditions, reduce the capacity of the facility to protect human health or the environment, or that enable a permittee to respond in a timely manner to common variations in the type and quantities of wastes managed, technological advancements, or changes necessary to comply with new rules where these changes can be implemented without substantially changing design specifications or management practices in the permit.

Major modifications include, but are not limited to vertical expansions of existing CCR units; horizontal expansions of existing units; the addition of a new solid waste handling process to the unit; a change of a site suitability requirement which could impact the original siting of the unit; selection of a corrective action plan; and any other modification that the Director determines to meet the criteria in Rule 391-3-4-.02(4)(a). Since major modifications can have a substantial impact on a CCR Unit, they require a more intensive review and public participation than minor modifications. Major modifications are approved by the Director and therefore are subject to appeal through the same process described above.

Major modifications of solid waste handling facilities are subject to the following process (see Figure 3). A completed application for the permit modification with supporting documents that describe the exact change to the permit conditions and explain why the change is needed will be submitted. A revised design for the requested change to the CCR unit will need to be submitted for review by EPD. The applicant must provide written verification that the CCR unit as proposed to be modified, conforms to all local zoning and land use ordinances, if any. CCR units located at electric utilities do not require a public hearing prior to the issuance of a permit or major modification.

Figure 3. Major modification process flow (placeholder)

Minor modifications do not substantially alter the CCR Unit and public participation is not required by Rule. The permittee must submit a written request for the minor modification with accompanying supporting documents which describe the change to be made and explaining why the change is needed.

If applicable, the permittee must submit a revised design for the requested change. If the minor modification involves a change in ownership, documentation that modification is in compliance with Rule 391-3-4-.02(8)(a). EPD's reviews of minor modifications typically do not take as long as the review required for major modifications and some types of requests are deemed approved by the EPD 45 days after receipt of a complete request for the modification unless, prior to that date, EPD notifies the permit holder that the request for modification is denied.

Affect of New Regulations on Existing CCR Units

Rule 391-3-4-.10 ensures that existing CCR landfills and impoundments will comply with 40 CFR 257 Subpart D. Rule 391-3-4-.10 (9) (a) 2. requires owners and operators of all CCR units to submit a complete permit application no later than two years from the effective date of the Rule (i.e. by November 22, 2018). The deadline to obtain a state CCR permit does not exempt a Georgia-based facility from meeting any earlier deadlines required by 40 CFR 257 Subpart D.

Rule 391-3-4-.02 (3) allows the Director to modify or revoke any solid waste handling permit issued pursuant to O.C.G.A. 12-8-24 if the holder of the permit is found, among other things, to be performing any activity which creates a threat to human health or the environment. If the holder of the permit does not follow the new regulations it can be deemed that the activity creates a threat to human health or the environment.

Closure of existing CCR units placeholder.

VII. Inspection, Compliance, and Enforcement Program

The inspection, compliance, and enforcement processes will remain the same as approved in the July 27, 1993 "Application to USEPA Region IV for Solid Waste Permit Program Approval in Accordance with Section 4005(c) of Subtitle D of the Resource Conservation and Recovery Act".

VIII. Investigations and Monitoring

Under O.C.G.A. 12-8-23.1 (a)(4), the Director is authorized to make investigations, analyses, and inspections to determine and ensure compliance. Code section (a)(12) further requires any person who is engaged in solid waste handling subject to the permit by rule provision of O.C.G.A. 12-8-23.1 to notify the division in writing within a reasonable number of days which the Director shall specify, the location and general description of such activity, identify the waste handled and give any other information which may be relevant, under such conditions as the Director may prescribe.

The Director has authority to conduct monitoring or testing under O.C.G.A. 12-8- 23.1(a)(4) which grants authority to make "analyses" to ensure compliance.

Chapter 391-3-4-.10(6)(d) of the Rules require a permitted CCR Unit to obtain concurrence from the Division for its groundwater monitoring system design, groundwater sampling and analysis plan, groundwater monitoring well installation, alternate source demonstrations, selection of a corrective remedy, and completion of a corrective remedy. The surface water monitoring plan shall be designed to determine the impact of the facility on all adjacent surface waters. The design of the groundwater monitoring plan shall be in accordance with the requirements of Groundwater Monitoring and

Corrective Action, as provided in Rule 391-3-4-.10(6). This rule incorporates the standards for Groundwater Monitoring and Corrective Action contained in Subpart E of 40 CFR Part 258.